

WASHINGTON DEPARTMENT OF ECOLOGY
ENVIRONMENTAL ASSESSMENT PROGRAM
FRESHWATER MONITORING UNIT
STREAM DISCHARGE TECHNICAL NOTES
MANUAL STAGE HEIGHT STATION

STATION ID: 01L050
STATION NAME: Anderson Cr. at mouth
WATER YEAR: 2007
AUTHOR: Chuck Springer

Introduction

Watershed Description

Anderson Creek is a tributary to the mainstem Nooksack River. The confluence is just west of the town of Deming. The primary land-cover types within the Anderson Creek watershed include agriculture, forestry, rural-density residential, and some grasslands. Anderson Creek supports populations of coho, steelhead, chinook, and chum salmon, as well as cutthroat trout.

Gage Location

The Anderson Creek staff gage station is located at the Roberts Road crossing, at river mile 0.8. Staff gages are lagged to bridge pilings on each side of the stream channel.

Table 1.

Drainage Area (square miles)	12.73
Latitude (degrees, minutes, seconds)	48° 51' 27" N
Longitude (degrees, minutes, seconds)	122° 20' 9" W
Primary Gage Index Type	Staff Gage
Secondary Gage Index Type	Tape Down

Rating Table(s)

Table 2. Rating Table Summary

Rating Table No.	5	6	
Period of Ratings	10/1/06 - 9/26/07	9/26/07 - 9/30/07	
Range of Ratings (cfs)	0 - 494 cfs	0 - 494 cfs	
No. of Defining Measurements	16	13	
Rating Error (%)	22.2%	16.7%	

Rating Table No.			
Period of Ratings			
Range of Ratings (cfs)			
No. of Defining Measurements			
Rating Error (%)			

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Narrative

The shift from Rating Table 5 to Rating Table 6 occurred in the last few days of the water year. Most of the defining measurements for Rating Table 6 were taken in subsequent water years.

Discrete Flow Record

Table 3. Discrete Flow Record Summary

Number of Discrete Stage Readings	39	
Maximum Observed Stage (feet) and Date	3.34	1/4/07
Maximum Predicted Discharge (cfs) and Date	174	1/4/07
Minimum Observed Stage (feet) and Date	0.66	10/25/06
Minimum Predicted Discharge (cfs) and Date	0	10/25/06
Range of Stage (feet) and Discharge (cfs)	2.68	174

Narrative

Lowest measured flows are considered "questionable" estimates due to extremely high variability in measurements.

Modeled Discharge

Table 4. Model Summary

Model Type (Slope conveyance, other, none)	Slope-conveyance
Range of Modeled Stage (feet)	3-6 ft
Range of Modeled Discharge (cfs)	143 - 494 cfs
Valid Period for Model	2005-2009
Model Confidence	±8.4%

Surveys

Table 5. Survey Type and Date (station, cross section, longitudinal)

Type	Date
Stn, X-sec, Longitudinal	10/26/2006

Activities Completed

Nothing of note.